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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/277,198	03/26/1999	YOSHIHITO ASAO	Q53565	3195

7590

08/15/2003

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EXAMINER

TAMAI, KARL I

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 08/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.



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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Paper No. 08132003

Application Number: 09/277,198
Filing Date: March 26, 1999
Appellants: ASAO, YOSHIHITO

Christopher R. Lipp
Registration Number 41,157
For Appellant

EXAMINER'S ANSWER

MAILED
AUG 15 2003
GROUP 2800

This is in response to the appeal brief filed May 30, 2003.

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is correct.

(7) *Grouping of Claims*

The rejection of claims 1-4 stand or fall together because appellant's brief does include a statement that this grouping of claims does not stand or fall together.

(8) *Claims Appealed*

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

<u>PATENT NUMBER</u>	<u>INVENTORS</u>	<u>PUBLICATION DATE</u>
09-103,052	Adachi et al.	4/1997
3,531,672	King	9/1970
2,235,903	Schonfelder	3/1941

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-4 are rejected under 35 U.S.C. 103(a). This rejection is set forth in prior Office Action mailed June 22, 2002. The rejection is repeated below for the convenience of the Board of Appeals and Interferences.

Claims 1 and 4 rejected under 35 U.S.C. 103(a) as being unpatentable over Adachi et al.(Adachi)(JP 9-103052) and King(US 3,531,672). Adachi discloses the stator for an alternator essentially as claimed except for the inner circumferential surfaces of the bridge portions are placed close with the axial end surfaces of the stator core and the stator coils being three phase. King discloses a three phase alternator with the bridge portions being close to the end of the stator to provide a generator with small axial dimensions and improved cooling. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the alternator of Adachi with the coil close to the stator as in King to provide a generator with small axial dimensions and improved cooling.

Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adachi and King, in further view of Schonfelder (US 2,234,903). Adachi and King teach

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every aspect of the invention except groove in the end surface of the teeth. Schonfelder teaches grooves in the end of the stator teeth to suppress vibrations. It would have been obvious to one of ordinary skill in the art at the time of the invention to have the stator of Adachi and King with the grooves of Schonfelder to suppress vibrations.

(11) Response to Argument

The Applicant's argument that Adachi and King do not teach the claimed invention is not persuasive. The claim is properly rejected as set forth in the Final Office Action, which is also repeated above. The Applicant's argument that King does not teach the coils being preformed is not persuasive because the Applicant's is considering the references individually, rather than the combined teaches of King and Adachi. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986) holding that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. In regards to the claims, Adachi clearly teaches that premolded coils 52 are preferred because of efficiency of manufacturing (see translation page 7-8, the last paragraph of page 7 through the second paragraph of page 8).

The Applicant's argument that Adachi teaches preformed coils are hard to assemble in to a stator core is not persuasive because that is a problem corrected by Adachi, as shown in figure 3. Adachi teaches that the preformed coils provide easy assembly. The Adachi does not teach how close the bridge portion are to be positioned near the end of the stator, there fore a person of ordinary skill in the art must look to

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other sources to determine the appropriate spacing. King teaches the same wave coil where that provides dual motivation to combine with Adachi to provide an axially compact, efficiency cool stator. The Applicant's argument that King does not teach A preformed coil without a gap is not persuasive because the limitation is not claimed.

The Applicant's opinion that prewinding the coils with a small axial gap would dramatically decrease manufacturing efficiency is not persuasive because the opinion is unsubstantiated and because there is still motivation to combine the references to provide a product which is axially compact and has good cooling. The Applicant's argument that King teaches away from Adachi because the windings are individually wound coils is not persuasive because Adachi teaches the coils are individually wound and inserted into the core for easy manufacture (see translation pages 7-8).

The Applicant's argument that King teaches away from preformed coils is not persuasive. King never states that the stator cannot be made with preformed coils. King is silent regarding how the winding are formed. A person of ordinary skill in the art would look to other wave wound coils to determine how the coils should be manufactured. Adachi teaches that wave wound coils are individually wound and inserted into the core for easy manufacture (see translation pages 7-8). Therefore the combined teaching of Adachi and King teach the Applicant's claimed invention.

The Applicant's argument that a prima facie case of obviousness has not met because there no motivation to combine is not persuasive. King teaches dual motivation for combining the coils of Adachi with the bridge (end) portions of the coils near the stator to provide an axially small motor (col. 1, line 30) and with improved

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cooling through the stator (col. 3, line 20). The Applicant's argument regarding modifying Adachi in view of King is not persuasive because the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In the instant application, the King suggests that an axially compact, efficiently cooled motor is produced when the bridge portions are close to the stator.

The rejection is proper and should be maintained.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Karl I.E. Tamai
Primary Examiner
Art Unit 2834

KIT
August 13, 2003

Conferees
Olik Chaudhuri (SPE AU 2814)
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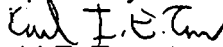
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